

Unit 5 Exam: exam is worth 100 points**Multiple Choice (Each correct response is worth 2 points)**

Identify the choice that best completes the statement or answers the question.

- D 1. The emotional tone of our dreams is especially likely to be influenced by activation of the _____ during REM sleep.
- MDMA area
 - pineal gland
 - frontal lobes
 - limbic system
 - sensory cortex
- C 2. Which of the following is most accurate about a typical night's sleep?
- The sleep cycle repeats itself every 60 minutes.
 - Everyone needs 8 hours of sleep per night.
 - As sleep progresses, Stage 3 and Stage 4 sleep diminish while REM sleep increases.
 - During REM sleep the muscles are tense and brain waves reveal deep relaxation.
 - Most of a night's sleep is spent in Stage 4 and REM.
- E 3. Sleepwalking may occur during
- REM sleep.
 - Stage 4 sleep.
 - Stage 2 sleep.
 - Stage 1 sleep.
 - any stage of sleep.
- A 4. Sleep apnea is a disorder involving
- the cessation of breathing during sleep.
 - the excessive use of sleeping pills or other sleep-inducing drugs.
 - periodic uncontrollable attacks of overwhelming sleepiness.
 - screams and panic during deep sleep.
 - hypnagogic sensations of falling or floating weightlessly.
- E 5. By 1960, the study of consciousness had been revived by psychologists' renewed interest in
- perception.
 - mental health.
 - emotion.
 - socialization.
 - mental processes.

- E 6. Research has indicated that hypnosis
- can force people to act against their will.
 - is a state of unconsciousness, not an altered state of consciousness.
 - is helpful in overcoming alcohol addictions.
 - can block sensory input.
 - enables some people to undergo surgery with only a local anesthesia.
- B 7. The large, slow brain waves associated with deep sleep are called
- beta waves.
 - delta waves.
 - theta waves.
 - sleep spindles.
 - alpha waves.
- B 8. Compared with when they were only 20 years old, 60-year-olds
- spend less time in Stage 1 sleep.
 - spend less time in deep sleep.
 - spend more time in paradoxical sleep.
 - complete REM rebound more often.
 - complete the sleep cycle more slowly.
- C 9. François was dismayed to discover that some of his football teammates were using drugs to enhance their footwork and endurance on the playing field. Which of the following drugs were the players most likely using?
- heroin
 - barbiturates
 - amphetamines
 - marijuana
 - morphine derivatives
- B 10. Alcohol consumption disrupts the processing of recent experiences into long-term memory by
- increasing self-consciousness.
 - decreasing REM sleep.
 - increasing anxiety.
 - decreasing tolerance.
 - decreasing sleep apnea.
- A 11. The divided-consciousness theory of hypnosis states that hypnosis involves
- dissociation.
 - age regression.
 - role-playing.
 - motivational conflict.
 - obedience to authority.

- E 12. Under hypnosis, Mrs. Mohammed is encouraged by her therapist to vividly experience and describe the details of an argument she had with her father when she was a child. The therapist is employing a technique called
- posthypnotic suggestion.
 - dissociation.
 - paradoxical sleep.
 - posthypnotic amnesia.
 - age regression.
- E 13. Until reading this question you were unaware that your shoes are pressing against your feet. This focusing of your conscious attention, or selective attention, illustrates that
- behaviorism explains many psychological phenomena.
 - consciousness is easily understood and defined.
 - the definition of consciousness is constantly evolving.
 - advances in neuroscience make it possible to relate brain activity to our mental states.
 - conscious awareness is one part of the dual processing that occurs in our two-track minds.
- B 14. Understanding hypnosis in terms of focused attention, distinctive brain activity, and the presence of an authoritative presence in a legitimate context, requires an integrated _____ approach.
- activation-synthesis
 - biopsychosocial
 - cognitive-behavioral
 - neuroadaptation
 - serial processing
- D 15. After sleeping for about an hour and a half, José enters a phase of paradoxical sleep. He is likely to
- have slower, more regular breathing.
 - have slower brain waves.
 - talk in his sleep.
 - have very relaxed muscles.
 - be easily awakened.
- E 16. Although Max never experiences caffeine withdrawal symptoms, he feels that he needs coffee every morning as part of his daily routine. Max best illustrates
- the pop-out phenomenon.
 - narcolepsy.
 - dissociation.
 - REM rebound.
 - psychological dependence.

- C 17. Chronic sleep debt is most likely to promote
- withdrawal.
 - sleep apnea.
 - obesity.
 - insomnia.
 - night terrors.
- E 18. After a stressful day at the office, Arthur has five or six drinks at a local bar before going home for dinner. Research suggests that Arthur's heavy drinking will have the most adverse effect on his ability to remember
- at the time he is drinking how to do long division.
 - the next day the names of the business associates he talked to before going to the bar.
 - at the time he is drinking the name of his employer and his own home address.
 - at the time he is drinking the names of the people he has just met.
 - the next day the names of the people he talked to and what he said while drinking.
- A 19. How is the hypothalamus involved in sleep?
- In response to decreasing light the hypothalamus' suprachiasmatic nucleus causes the pineal gland to increase production of melatonin, leading you to sleep.
 - During sleep the hypothalamus stimulates the production of free radicals, molecules that are toxic to neurons, which weakens unused connections.
 - The hypothalamus triggers the pituitary gland in the endocrine system to produce the hormone thyroxin, which leads you to sleep.
 - The action of the hypothalamus suppresses immune cell production that fights off viral infections and cancer.
 - Cell clusters in the hypothalamus stimulate the production of relatively slow alpha waves, signaling the transition from deep relaxation to sleep.
- E 20. Which of the following is the best advice for a person concerned about occasional insomnia?
- Eat a big dinner late in the evening so you'll feel drowsy at bedtime.
 - Engage in some form of vigorous physical exercise shortly before bedtime.
 - Be sure to sleep later than usual once you do get to sleep.
 - Relax with a drink of your favorite alcoholic beverage just before bedtime.
 - Relax and drink a glass of milk before bedtime.
- E 21. Which of the following typically occur(s) during REM sleep?
- muscular tension
 - bed-wetting
 - narcolepsy
 - night terrors
 - genital arousal

- B 22. Circadian rhythm refers to
- the pattern of emotional ups and downs we routinely experience.
 - a pattern of biological functioning that occurs on a roughly 24-hour cycle.
 - a pattern of brain waves that occur during sleep.
 - the cycle of five distinct stages that we experience during a normal night's sleep.
 - the experience of sleep apnea following an extensive transoceanic flight.
- B 23. Which of the following sleep disorders would be the most incapacitating for a commercial bus driver?
- sleepwalking
 - narcolepsy
 - insomnia
 - sleep apnea
 - night terrors
- B 24. Forty-year-old Lance insists that he never dreams. Research suggests that he probably
- experiences very little REM sleep.
 - would report a vivid dream if he were awakened during REM sleep.
 - dreams during Stage 4 rather than during REM sleep.
 - experiences more Stage 4 sleep than most people.
 - passes through the sleep cycle much more rapidly than most people.
- D 25. What is the danger of labeling behaviors such as too much eating, shopping, exercise, sex, or gambling as addictions?
- No physical or emotional pain is associated with these behaviors.
 - It can lead to increased feelings of shame and guilt.
 - Abusers may be more likely to hide their abuse and avoid seeking help.
 - It can be used as an "all-purpose" excuse to explain away the behaviors.
 - Abusers are more likely to experience prejudice and discrimination.
- C 26. The circadian rhythm is influenced by light-sensitive retinal proteins that trigger signals to the
- sleep spindles.
 - thyroid gland.
 - suprachiasmatic nucleus.
 - MDMA.
 - dopamine reward system.
- D 27. Nightmares are to _____ as night terrors are to _____.
- Stage 4 sleep; Stage 1 sleep
 - Stage 1 sleep; REM sleep
 - narcolepsy; sleep apnea
 - REM sleep; Stage 4 sleep
 - delta waves; alpha waves

- D 28. Hypnotized participants asked to lower their arm into an ice bath exhibited no pain when given that suggestion. Psychologists supporting the social influence theory would suggest that
- because of our two-track minds much of our behavior occurs on autopilot.
 - endorphins, the body's natural pain killers, were acting to diminish pain sensations in hypnotized subjects.
 - hypnosis caused a split in awareness so that only some part of the dissociated consciousness experienced pain.
 - the participant was caught up in playing the role of a "good hypnotic subject" and ignored the pain.
 - the presence of the hypnotist had little impact on the participant's experience of pain.
- A 29. Research on the use of addictive drugs indicates that
- many people are able to stop using addictive drugs without professional help.
 - an occasional cigarette smoker almost always becomes a heavy smoker.
 - regular marijuana smokers typically experience an irresistible craving for THC.
 - individuals who receive morphine from physicians for pain relief usually develop the irresistible cravings of an addict.
 - all categories of psychoactive drugs are associated with dependence.
- E 30. According to Freud, the latent content of a dream refers to
- the previous day's events that prompted the dream.
 - the story line of our dreams.
 - the sensory stimuli in the sleeping environment that are incorporated into the dream.
 - its accompanying brain-wave pattern.
 - its underlying but censored meaning.
- E 31. People are particularly responsive to hypnosis if they
- were diagnosed with a psychological disorder at one time in their lives.
 - are below average in intelligence and education.
 - are easily distracted and have difficulty focusing attention.
 - suffer a physical or psychological dependence on alcohol.
 - strongly expect that they can be hypnotized.
- A 32. Which drugs are most likely to be prescribed as tranquilizers?
- barbiturates
 - amphetamines
 - hallucinogens
 - dissociatives
 - opiates

- A 33. The human sleep cycle repeats itself about every
- 90 minutes.
 - 4 hours.
 - 30 minutes.
 - 1.5 days.
 - 2 1/2 hours.
- A 34. Chemical substances that alter perceptions and moods are called _____ drugs.
- psychoactive
 - dissociative
 - neuroadaptive
 - narcoleptic
 - hypnagogic
- B 35. Research on sleep patterns indicates that
- different sleep patterns reflect differences in latent dream content.
 - sleep patterns may be genetically influenced.
 - REM sleep may not be necessary for normal functioning.
 - everyone needs a minimum of 8 hours of sleep per night to function well.
 - older adults and newborns have very similar sleep patterns.
- D 36. Traffic accident rates have been found to _____ after the spring change to daylight savings time and to _____ after the fall change back to standard time.
- increase; increase
 - decrease; decrease
 - stay the same; stay the same
 - increase; decrease
 - decrease; increase
- E 37. Which of the following is evidence for cultural influences on sleep patterns?
- The sleep patterns of identical twins are usually similar.
 - Newborn babies spend more time in REM sleep than in NREM sleep.
 - Brain waves are generally elevated and variable during REM sleep.
 - Sleep patterns reflect differences in latent and manifest dream content.
 - People in countries without electric lights generally sleep longer.
- C 38. In one study, both hypnotized and un hypnotized subjects were told to throw acid in a researcher's face. In this experiment, hypnotized people
- experienced much more anxiety than un hypnotized individuals.
 - usually refused to engage in antisocial behavior.
 - behaved in the same fashion as un hypnotized individuals.
 - were easily influenced to act against their own will.
 - often immediately awakened from the hypnotic state.

- A 39. As drug users experience neuroadaptation, they demonstrate signs of
- tolerance.
 - hallucinations.
 - NREM.
 - dissociation.
 - narcolepsy.
- C 40. LSD and other powerful hallucinogens are chemically similar to, and therefore block the actions of, a subtype of the neurotransmitter serotonin. At the synapse, these drugs act as a(n)
- depressant.
 - agonist.
 - antagonist.
 - endorphin.
 - stimulant.
- B 41. While Bev was hypnotized, her therapist suggested that during the next several days she would have a strong desire to eat well-balanced meals. The therapist was apparently making use of
- paradoxical sleep.
 - posthypnotic suggestion.
 - posthypnotic amnesia.
 - age regression.
 - activation-synthesis theory.
- B 42. Slow-wave sleep promotes
- narcolepsy.
 - effective memory.
 - REM rebound.
 - insomnia.
 - dissociation.
- A 43. At 3 o'clock in the morning, John has already slept for 4 hours. As long as his sleep continues, we can expect an increasing occurrence of
- REM sleep.
 - Stage 4 sleep.
 - sleepwalking.
 - muscle tension.
 - hypnagogic sensations.
- E 44. When cocaine is snorted, free-based, or injected, it produces a rush of euphoria by
- producing hallucinations.
 - increasing the occurrence of alpha waves.
 - decreasing manifest content.
 - triggering a state of dissociation.
 - blocking the reuptake of dopamine.

- A 45. REM sleep is called paradoxical sleep because
- our nervous system is highly active, while our voluntary muscles hardly move.
 - our heart rate is slow and steady, while our breathing is highly irregular.
 - we are deeply asleep but can be awakened easily.
 - it leads to highly imaginative dreams that are perceived as colorless images.
 - our brain and nervous system are less active and our muscles are very active.

Short Answer: Each short answer question is worth 5 points, answer any two.

1. A good friend of yours hopes that hypnosis will improve his memory and help him study longer and more effectively. He worries, however, that he might not be easily hypnotized. Your mother hopes that hypnosis will help relieve her arthritis pain but fears that under hypnosis she might do something embarrassing. Discuss the extent to which the hopes and fears of your friend and your mother are realistic. Where appropriate, use research evidence to support your conclusions.
2. A classmate believes that alcohol, marijuana, and cocaine all have similar effects on behavior and that therefore all three drugs ought to be legalized. Carefully evaluate the strengths and weaknesses of your classmate's position.
3. Because he has difficulty falling asleep at night, Dr. Hogan doesn't go to bed until very late. Before he retires, he tries to wear himself out by running around the block several times. Then he treats himself to a beer and perhaps a pizza while preparing for the next day's early morning classes. What specific advice would you give Dr. Hogan to help him fall asleep?
4. Discuss why "consciousness" was not frequently studied by psychologists in the 1950s and 1960s, and why psychologists started researching consciousness again after this period.

45. ANS: A PTS: 1 DIF: Medium
 REF: Page 180 | Section- States of Consciousness OBJ: 3
 TOP: REM sleep MSC: Factual | Definitional

SHORT ANSWER

1. ANS:

Students should explain that your friend should not count on hypnosis to improve his recall after studying, because research indicates that “hypnotically refreshed” memories are often inaccurate. Your friend could be told that approximately 20 percent of people are highly hypnotizable. Your mother should be told that studies support the idea that hypnosis can relieve pain, but studies also indicate that hypnotists can induce patients to perform unlikely acts (although a legitimate therapist would be unlikely to induce anything unethical or harmful to the patient).

PTS: 1 REF: Section- States of Consciousness MSC: Conceptual | Application

2. ANS:

Students should point out that these three drugs belong in different categories and have very different effects on the body. Alcohol is classified as a depressant and acts to slow the body down. Alcohol also has a disinhibiting effect on behavior, causing some people to act on harmful impulses. People who abuse alcohol develop a tolerance for the drug, which can lead to dependency and addiction. Marijuana is categorized as a hallucinogen, amplifying sensations (which can interfere with coordination and perceptual skills) and producing euphoria. Unlike the other drugs, regular use of marijuana doesn't produce increased tolerance for the drug. Cocaine is categorized as a powerful stimulant, and use can very quickly produce tolerance and addiction. The stimulant effects of cocaine are dramatic, with a very intense high followed by a period of agitation and depression.

PTS: 1 REF: Section- States of Consciousness MSC: Conceptual | Application

3. ANS:

Students should point out that Dr. Hogan's behaviors contradict the recommendations of sleep researchers regarding insomnia. People who struggle to fall asleep should not exercise in the evening, and should avoid alcohol and rich food right before bedtime. Dr. Hogan should be advised to stop those behaviors and use any of the other techniques researchers recommend for treating insomnia: avoid caffeine after noon, sleep on a regular schedule, put clocks out of sight, and manage stress levels during the day.

PTS: 1 REF: Section- States of Consciousness MSC: Conceptual | Application

4. ANS:

Students should explain that psychologists increasingly focused on direct observations of behavior during the 1950s and 1960s. As a result, the study of consciousness (which is obviously not directly observable) became less popular. Students should then identify that technological advances in neuroscience after 1960 made it more possible to measure aspects of consciousness (e.g., brain waves), so the study of consciousness became more common and popular again.

PTS: 1 REF: Section- States of Consciousness MSC: Conceptual | Application